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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/171,910	03/18/1999	DIRK VAN DIJK	VR2-002	8639

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WELLS ST. JOHN P.S.
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SPOKANE, WA 99201-3828

EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT	PAPER NUMBER
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1772

24

DATE MAILED: 03/14/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/171,910

Applicant(s)

VAN DIJK ET AL.

Examiner

Alicia Chevalier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 56-75 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 56-75 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

RESPONSE TO AMENDMENT

Election/Restrictions

1. The Restriction Requirement for claims 31-50 has been withdrawn due to Applicant's Amendment canceling the claims. The new claims 56-75 do not encompass all the previously claimed species and do not require restriction at this time.

NEW REJECTIONS

2. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Objections

3. The numbering of claims is not in accordance with 37 CFR 1.126 which requires the original numbering of the claims to be preserved throughout the prosecution. When claims are canceled, the remaining claims must not be renumbered. When new claims are presented, they must be numbered consecutively beginning with the number next following the highest numbered claims previously presented (whether entered or not).

Misnumbered claims 55-64 been renumbered 56-75.

Claim Rejections - 35 USC § 112

4. Claims 56-75 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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The terms "elongated plates" and "plate-shaped" in claims 56, 70, 74 and 75 are unclear which renders the claims vague and indefinite. It is unclear from the specification, the drawings and the claim language how the plates are different from the fibers.

The phrase "ratio between the length in the first particle direction and said transverse dimension amounting to a minimum of 4" in claim 62 is unclear which renders the claim vague and indefinite. It is unclear if Applicant is claiming that some particles are orientated in the first particle direction and the transverse dimension at a ratio of 4 or if Applicant is claiming a ratio between the length of the particle to its width.

The phrase "amounting to a minimum" in claim 62 is unclear which renders the claim vague and indefinite. The use of "amounting to" makes it unclear if the minimum is really 4.

Claim 66 is unclear which renders the claim vague and indefinite. Claim 66 recites "the polyolefin material is a material selected from the group consisting of polypropylene, polystyrene, polyethylene, or polyacrylate." The claim is indefinite because polystyrene and polyacrylate are not olefins. Although the terms of a claim may appear to be definite, inconsistency with the specification disclosure or prior art teachings may make an otherwise definite claim take on an unreasonable degree of uncertainty. *In re Cohn*, 438 F.2d 989, 169 USPQ 95 (CCPA 1971); *In re Hammack*, 427 F.2d 1378, 166 USPQ 204 (CCPA 1970). MPEP 2173.03. Additionally, the use of "or" in a Markush Group is improper (See MPEP 2173.05(h)).

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10

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USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 67 recites the broad recitation particles of non-wood material, and the claim also recites particles include fibers of natural cellulose polymer which is the narrower statement of the range/limitation. Further more claim 69 recites the broad recitation particles of non-wood material, and the claim also recites particles include glass fibers which is the narrower statement of the range/limitation.

Claim 74 is unclear which renders is vague and indefinite. It is unclear from the claim language if Applicant is claiming that the particles shape or the end shape of the plastic-based composite or if the particles are now formed in a separate layer then the plastic mass. Is Applicant trying to claim that plastic based composite is formed into a wall board?

Claim 75 is unclear which renders is vague and indefinite. It is unclear from the claim language if Applicant is claiming that the particles shape or the end shape of the plastic-based composite or if the particles are now formed in a separate layer then the plastic mass.

Claim Rejections - 35 USC § 103

5. Claims 56-75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bevan (3,770,859) in view of Woodham (5,474,722).

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Bevan discloses building materials for use as wall panels or partition panels (col. 1, lines 25-27). The building material comprises a liquid setting powder and a fibrous support constituent. The liquid setting powder can be plasters, gypsum, anhydrite, Portland cement and high alumina cement. The Fibrous materials can be glass, asbestos, sisal, polypropylene, and/or wood fibre. The building material may further comprise fillers such as pulverized fuel ash, crushed stone, expanded clay aggregates, "Perlite." Fiber orientation is achieved readily by adjusting the feed rate of the powder fiber mix so that the leading part of each fibre is arrested by the already compacted surface of material in the mould and the trailing part is free to continue to fall and slip each fibre into the approximate horizontal position leading to fibre orientation lengthwise of the panel. See column 2, lines 44-60. In addition to mixing the powder with relatively long thick oriented fibers it is also useful to intimately premix the powder with shorter and very much finer or thinner fibers so that these become intimately and evenly distributed throughout the volume of powder (col. 4, lines 10-21).

Bevan fails to teach that the binder is plastic mass and the claimed length of the fibers.

Woodhams discloses a fiber or flake reinforced thermoplastic composite material for manufacture (col. 1, lines 8-10). The composite comprised oriented fibers of wood or cellulosic fibers such as hemp or bamboo. The resin component may comprise virgin or recycled thermoplastics derived from polyolefins such as polyethylene or polypropylenes. See column 4, lines 33-59. The wood fiber concentration is less than 80% by weight (col. 5, lines 49-51).

It would have been obvious to one of ordinary skill at the time of the invention to use a thermoplastic composition as the binder in Bevan as taught by Woodhams because plastics are cheaper and stronger to achieve thinner boards.

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The exact length of the long and short fibers is deemed to be a cause effective variable with regard to the thickness of the board desired. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as the length of the long and short fibers through routine experimentation in the absence of a showing of criticality in the claimed combined thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990). One of ordinary skill in the art would have been motivated to use fibers of small length in order to thinner boards.

Although the combination of Bevan and Woodhams does not explicitly teach the limitations in claim 62 regarding the mechanical properties, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. wood fibers in thermoplastic binder). The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments filed in paper #23 regarding the previous rejections are moot since the rejections have not been repeated for the new claims.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Blaine Copenheaver can be reached by dialing (703) 308-1261. The fax phone number for the organization official non-final papers is (703) 872-9310. The fax number for after final papers is (703) 872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

3/8/02



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